

**Abstract****Dyeing with sulfur dyes and sulfur vat dyes**

- 5 The present invention relates to a process for dyeing fiber materials with sulfur dyes by regenerating the dyebath redox potential, which comprises, during the dyeing process, the dyeing liquor being circulated between the dyeing apparatus and an attached electrolytic cell and the sulfur dye which has been unwantedly oxidized in the dyebath being cathodically reduced in the electrolytic cell.